JIMMY FENG

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EXECUTIVE SUMMARY

- Geospatial & GIS data scientist and analyst with 6 years' experience developing location and statistical models with a focus on the built environment and its effects on public health issues (food and job access & social costs of energy consumption) and real estate
- Deep expertise in developing space-time GIS software, spatial econometric modeling, geospatial analysis (spatial autocorrelation, spatial regression, etc.), transportation modeling, integrating heterogeneous data sets, data visualization, and technical writing
- Fluent in Python and ArcGIS Map, Pro, and Online; experienced with R, HTML, (Postgre)SQL, GeoDa, QGIS, Git and TransCAD
- Results-oriented leader and technical communicator: mentored 2 PhD students; former lead course instructor of Geovisualization and GIS to forty undergraduate students; and served as liaison between graduate student body and department faculty
- Formerly a geospatial consultant at National Geographic Society's Geographic Visualization Lab, strategically managing the development of a dynamically updated land-cover map of the world for environmental risk management with partners at Google

EDUCATION

PhD in Geography & GIS | University of Tennessee, Knoxville | 4.00 GPA — *Present – Anticipated 2022*
- Dissertation: Extracting human perceptions from Google reviews and group interviews with deep learning algorithms to understand spatial and perceived access to basic needs with e-grocery, telehealth, and e-work
- Awarded a four-year Ph.D. fellowship and graduate fellowship for dissertation research from the University of Tennessee (1 to 2 scholarships available for ~100 applicants), securing a total of ~$120,000
- Received 2021 teaching excellence award for teaching undergraduate GIS course
- Drafted and managed legal and regulatory compliance programs to survey and interview 450 people

BA in Geography and Urban Studies | State University of New York at Geneseo | 3.60 GPA — *2018*

PROFESSIONAL & RESEARCH EXPERIENCE

Graduate Research Assistant: **University of Tennessee, Department of Electrical Engineering and Computer Science** — *Present*
- Collaborated with 5 researchers at the National Science Foundation, Oak Ridge National Laboratory and University of Tennessee, resulting in a submitted *Nature* publication, with 2 more forthcoming, all within 6 months after work began
- Developed spatial econometric models with pysal (Python) and GeoDa to understand how households' financial inability to pay utility bills arises from socioeconomic, geographic, and health factors in the U.S.
- Refined local spatial autocorrelation models in ArcGIS Pro to identify clusters of energy burden across the U.S.

Graduate Research Assistant: **University of Tennessee, Departments of Geography & History** — *2020 – 2021*
- Wrote Python functions and scripts to automate the data cleaning, social network analysis, statistical modeling, visualization, and mapping of academic knowledge networks
- Created space-time GIS layers and functions with Tracking Analyst in ArcGIS Map 10.8 to query, visualize, and analyze movement trajectories of global author collaboration networks

Geospatial and Cartography Consultant: **National Geographic Society – Geographic Visualization Lab** — *2019*
- Managed collaboration with 20 geospatial consultants and satellite imagery experts to develop a training dataset for a dynamically-updated global land cover map for environmental risk management
- Created 4 maps derived from satellite imagery for a deep-sea science expedition in the Russian Arctic Sea
- Responsible for high-end cartographic production and scientific report writing for geospatial data products

Geospatial and GIS Consultant: **Community Solutions** — *2018 - 2019*
- Analyzed survey results of 40 residents and 267 households in the Seth Low Housing Projects which found that more than 33% suffered from rodent or cockroach infestation and 30% identified mold. Click for full report.
- Reports and analyses of the housing landscape in Brownsville were used to establish a community land trust
- Constructed a GIS database containing housing, land parcel, zoning, and population data in Brownsville
- Analyzed areas with a large number of housing foreclosures, potential land parcels for acquisition, and distance to train stations with various geospatial tools including hotspot and network analysis in ArcGIS Map and Pro

EXTRA-CURRICULARS

- Vice-President of geography graduate student body, organizing social events and checking-in on students' wellbeing and progress
- Geospatial and pro-bono consulting to other graduate students, assisting with data management plans, GIS methodology, Python training, legal and regulatory compliance with human subjects research, and editing technical and scientific reports